

Title (en)

VEHICLE ACOUSTIC CONTROL DEVICE, AND VEHICLE ACOUSTIC CONTROL METHOD

Title (de)

FAHRZEUGAKUSTIKSTEUERUNGSVORRICHTUNG UND FAHRZEUGAKUSTIKSTEUERUNGSVERFAHREN

Title (fr)

DISPOSITIF DE RÉGULATION ACOUSTIQUE DE VÉHICULE, ET PROCÉDÉ DE RÉGULATION ACOUSTIQUE DE VÉHICULE

Publication

**EP 2991385 A4 20160413 (EN)**

Application

**EP 14787629 A 20140423**

Priority

- JP 2013091683 A 20130424
- JP 2014002291 W 20140423

Abstract (en)

[origin: EP2991385A1] A vehicle acoustic control device includes: a plurality of speakers (23) disposed on a periphery of a passenger; and a controller (21) that controls a sound field in a vehicle cabin by individually driving the plurality of speakers (23). The controller (21) rotates and displaces the sound field in a direction opposite to a changing direction of a vehicle behavior. At this time, when a frequency at a time of change of the vehicle behavior is higher than a predetermined frequency, the controller (21) changes the sound field in the vehicle cabin in the direction opposite to the changing direction of the vehicle behavior, and increases a variation of the sound field as a variation of the vehicle behavior is being larger.

IPC 8 full level

**H04S 7/00** (2006.01); **B60R 11/02** (2006.01); **G10K 15/00** (2006.01); **H04R 1/40** (2006.01); **H04R 3/12** (2006.01); **H04S 5/02** (2006.01);  
**H04S 3/00** (2006.01)

CPC (source: EP US)

**G10K 15/00** (2013.01 - EP US); **H04R 5/04** (2013.01 - US); **H04S 7/30** (2013.01 - US); **H04S 7/302** (2013.01 - EP US);  
**H04R 2460/07** (2013.01 - EP US); **H04R 2499/13** (2013.01 - EP US); **H04S 3/00** (2013.01 - EP US); **H04S 2400/13** (2013.01 - EP US)

Citation (search report)

- [A] JP 2010105643 A 20100513 - PIONEER ELECTRONIC CORP
- [A] US 2006215846 A1 20060928 - KOBAYASHI YASUNORI [JP], et al
- [A] US 2004228498 A1 20041118 - SEKINE SATOSHI [JP]
- [A] EP 1787866 A1 20070523 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- See references of WO 2014174841A1

Cited by

CN110463227A; US11445319B2; WO2018177751A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2991385 A1 20160302; EP 2991385 A4 20160413;** CN 105144755 A 20151209; JP 5958648 B2 20160802; JP WO2014174841 A1 20170223;  
US 2016073214 A1 20160310; WO 2014174841 A1 20141030

DOCDB simple family (application)

**EP 14787629 A 20140423;** CN 201480023348 A 20140423; JP 2014002291 W 20140423; JP 2015513571 A 20140423;  
US 201414786396 A 20140423